Remarks

The Office Action mailed May 20, 2005, and made final, has been carefully reviewed and the foregoing amendment has been made in consequence thereof.

Claims 1-25 are pending in this application. Claims 1-15 and 22-25 are allowed. Claim 16 stands rejected. Claims 17-21 are objected to.

The rejection of Claim 16 under 35 U.S.C. § 102(b) as being anticipated by Jacobsen et al. (U.S. Patent No. 5,744,947) is respectfully traversed.

Jacobsen et al. describe a movement actuator which includes an elongate filament made of a flexible material, and a strip of shape memory alloy disposed on the surface of one side of the filament. The shape memory alloy is responsive to actuation signals (i.e., heat, current) for changing its shape which causes the filament to move to accommodate the change in shape of the alloy. See Abstract. Jacobsen et al. further describe a sensor system for determining the degree of movement and the direction of movement of a flexible rod 92. The rod 92 is anchored at one end in a base 102 so that the free end of the rod is subject to forces in various directions indicated by the arrows 106. Disposed circumferentially about the bar 92 are four strain gauges 110 that produce signals whose magnitudes are an indication of the degree of strain occurring at the location of the strain gauges. As a force is applied to the free end of the rod 92, to cause it to bend, the bar strains differently at different circumferential locations about the rod and these strains, at least at the location of the strain gauges 110, are detected and signals indicating the amount of strain are supplied to a microprocessor 114.

Claim 16 has been amended to recite that the column portion of the claimed shock column comprises "a buckling failure formed therein" and that the buckling failure is "configured to cause said column to buckle when a specific pressure is applied."

Jacobsen et al. do not describe or suggest a shock column comprising a buckling failure formed therein that is configured to cause the column to buckle when a specific pressure is applied. Rather, Jacobsen et al. describe flexible rods with one end mounted in a base and strain gauges configured to measure an amount of strain as the rods bend, presumably in response to one or more actuation signals. Flexible rods and elongated filaments are not reasonably construed as a shock column configured to buckle at a specific applied pressure. For the reasons set forth above, Claim 16 is submitted to be patentable over Jacobsen et al.

For the reasons set forth above, Applicants respectfully request that the Section 102 rejection of Claim 16 be withdrawn.

The objection to Claims 17-21 is respectfully traversed. Claims 17-21 depend from independent Claim 16 which is submitted to be patentable for the reasons provided above. For these reasons, Applicants request that the objection to Claims 17-21 be withdrawn.

In view of the foregoing amendments and remarks, all the claims now active in this application are believed to be in condition for allowance. Reconsideration and favorable action is respectfully solicited.

Respectfully Submitted,

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